

INCH-POUND

MS20663D

30 October 1999

Superseding

MS20663C

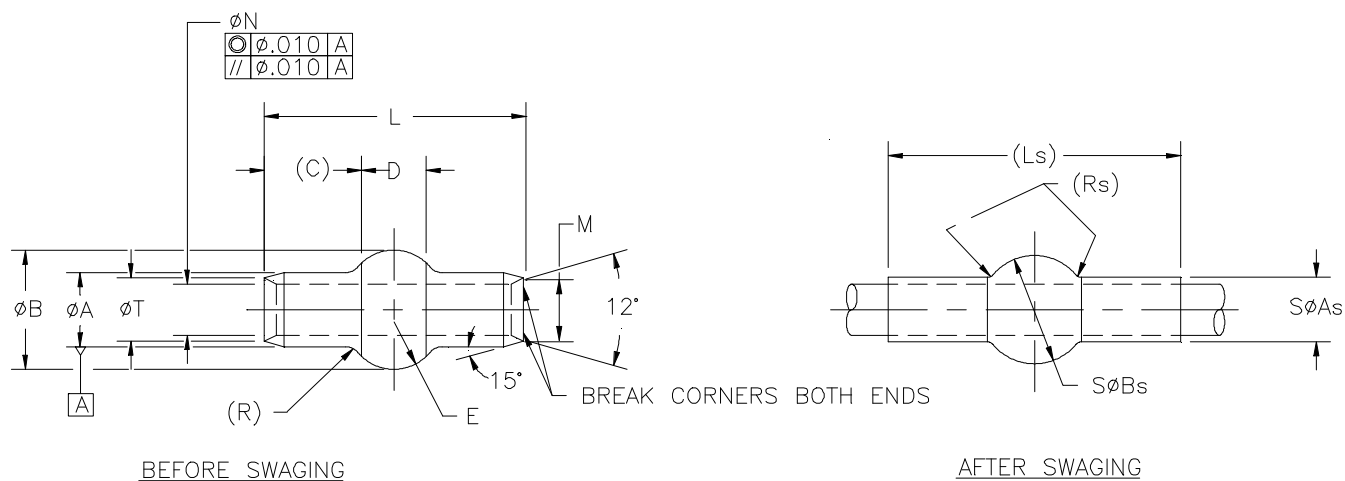
22 FEBRUARY 1999

MILITARY SPECIFICATION SHEET

BALL END, WIRE ROPE, SWAGING, DOUBLE SHANK

This specification is approved for use by all departments and agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation: MIL-DTL-781.



ⓓ Denotes change(s)

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TABLE I. Part numbers and dimensions.

MS PART NUMBER CORROSION RESISTANT STEEL	WIRE ROPE DIA		MINIMUM BREAKING STRENGTH	ÆA		ÆAs		ÆB		SÆBs SPHERICAL		C REF		D REF		E RAD REF
	NOM	REF														
MS20663C2	1/16	.062	480	.127		.112		.207		.190		.125	.114	-.000 -.003		.0825
MS20663C3	3/32	.093	920	.163	+.000 -.004	.143	+.000 -.003	.277	+.000 -.004	.253	+.000 -.003	.188	.152	-.000 -.004		.110
MS20663C4	1/8	.125	2000	.218		.190		.345			.315		.250	.1895		
MS20663C5	5/32	.156	2800	.254		.222	+.000 -.004	.419		.379	+.000 -.004	.313	.2270			.165
MS20663C6	3/16	.187	4200	.293	+.000 -.005	.255	+.000	.487	+.000 -.005	.442		.375	.2640	+.000		.192
MS20663C7	7/32	.218	5600	.347		.302	-.005	.555			.505	+.000	.438	.3025	-.005	
MS20663C8	1/4	.250	7000	.401		.348		.624		.567	-.005	.500	.3395			.247
MS20663C9	9/32	.281	8000	.439		.382	+.000	.694		.632	+.000	.562	.3775			.275
MS20663C10	5/16	.312	9800	.475		.413	-.007	.763		.694	-.007	.625	.4145			.302

MS PART NUMBER CORROSION RESISTANT STEEL	L ±.0075	Ls REF	M +.010 -.000	ÆN		R RAD REF	Rs RAD REF	ÆT +.000 -.010
MS20663C2	.3620	.390	.079	.073	+.004 -.000	.028	.014	.109
MS20663C3	.5250	.578	.114	.104		.037	.019	.141
MS20663C4	.6880	.765	.152	.139		.046	.023	.188
MS20663C5	.8500	.953	.185	.169		.056	.028	.219
MS20663C6	1.0120	1.140	.221	.201		.065	.033	.250
MS20663C7	1.1750	1.328	(a)	.233	+.005 -.000	.075	.038	.297
MS20663C8	1.3370	1.515	(a)	.264		.084	.042	.344
MS20663C9	1.4970	1.719	(a)	.297		.094	.046	.375
MS20663C10	1.6640	1.875	(a)	.328		.103	.046	.406

(a) No tapered bellmouth on -7, -8, -9, -10.

(b) Reference dimensions are for design purposes only and are not an inspection requirement.

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REQUIREMENTS:

- Material: In accordance with MIL-DTL-781.
- Finish: In accordance with MIL-DTL-781.
- Swage: Swage in accordance with specification MIL-DTL-6117.
- Tolerances: Unless otherwise specified: decimals ± .010, angles ± 3°.

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NOTES:

- Dimensions in inches,
- Interpret drawing in accordance with ASME Y14.5M.
- Remove all burrs and sharp edges. (See Procurement specification for definition)
- Interchangeability relationship: MS20663 and AN663 parts identified by the same dash number are universally functionally, and dimensionally interchangeable.
- In the event of a conflict between the text of this document and the references cited herein the text of this document takes precedence..
- Unless otherwise specified, issues of reference documents are those in effect at the time of solicitation..
- MS20663 supersedes AN663.

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8. Corrosion resistant steel parts can be universally substituted for carbon and alloy steel parts in accordance with the substitution table. Carbon and alloy steel parts cannot be substituted for corrosion resistant steel parts.
9. Carbon and alloy steel parts are inactive for new design.

SUBSTITUTION TABLE

MS PART NUMBER	
CORROSION RESISTANT STEEL	CARBON STEEL, CAD PLATED
MS20663C2	MS20663-2
MS20663C3	MS20663-3
MS20663C4	MS20663-4
MS20663C5	MS20663-5
MS20663C6	MS20663-6
MS20663C7	MS20663-7
MS20663C8	MS20663-8
MS20663C9	MS20663-9
MS20663C10	MS20663-10

MILITARY INTEREST

Custodians:

Navy - AS
 Army - CR4
 Air Force - 99

Review activities:

Army - AR, MD
 Navy - MC
 Air Force - 82

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Preparing Activity:
 DLA- GS

(PROJECT: 1560-0263)